



KAT Controls Private Limited

HIGH FREQUENCY INLINE INDUCTION PREHEATER



HIGH FREQUENCY INLINE INDUCTION PRE-HEATER 30 & 40

Kat controls make High Frequency Inline Induction Preheaters are designed to meet the needs of continuous Extrusion Lines. They are used in these lines for heating wire conductors to improve the adhesion of insulation material on the conductor. It ensures an even flow of insulation as the temperature of the conductor remains constant throughout the run.

The preheater operates as a completely independent standalone unit. It works on a principle of induction heating. Preheaters have dynamic and free running pulleys of shorting (conductive) and insulating (with ceramic rings) type. An alternating electromagnetic field is applied from a solid-state electronic power controller with accurate and continuous line speed feedback. It provides correct secondary voltage as per desired settings and in turn, a correct pre-heating temperature. The wire or the conductor to be heated passes through the induction coils between shorting and insulating pulleys.

Features:

1. Solid State Close Loop Control
2. Reliable, in-process heating.
3. Dynamic and Free running Pulleys
4. Insulating Pulleys with Ceramic Rings for Low Inertia, Low Heat Loss to avoid wearing caused due to continuous use.
5. Sturdy and Rugged Mechanical Construction suitable for higher line Speeds.



Model - IPH 30**Model - IPH 40****Conductor Material**

Copper, Aluminum

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Diameter Range

0.5 to 4 sq.mm

0.5 to 16 sq.mm

Given dimension is for solid round conductors.

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Line Speed

800mpm – 300mpm

800mpm – 150mpm

Induction Frequency

500/ 400 Hz

500/ 400 Hz

Max Wire Temperature

120° C

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Power Output

18.5 kW

37 kW

Indications

Power ON, Heat ON, Heat OFF, Secondary Voltmeter

Power ON, Heat ON, Heat OFF, Secondary Voltmeter

Controls

Power ON / OFF Switch, Set Heat Potentiometer, Power ON, Heat ON / OFF Pushbuttons, Auto / Manual Mode Selector switch

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Pulleys

1 No. Conductive Double V Groove Pulley & 4 Nos. Ceramic Ring Type Insulating Pulleys

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Input Power Supply3 Phase, 415 V AC \pm 10%, 50 Hz3 Phase, 415 V AC \pm 10%, 50 Hz**Controller Type**

- ✓ Solid state Electronic Controller to monitor & control the primary voltage of Induction Coil / Transformer
- ✓ Construction: Free standing & Floor mounting type, Powder coated unit with acrylic window on front door.

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- ✓ Conductor Entry & Exit height suitable to your line height (normally 1 meter from ground level)
- ✓ Horizontal & Vertical Guide Rollers are not required
- ✓ Dimensions :

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Dimensions

1600 mm (H) x 700 mm (W) x 600 mm (D)

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2 Pulley Preheater Unit



5 Pulley Preheater Unit